

# PATENT ABSTRACTS OF JAPAN

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(71)Applicant : TOSHIBA CORP

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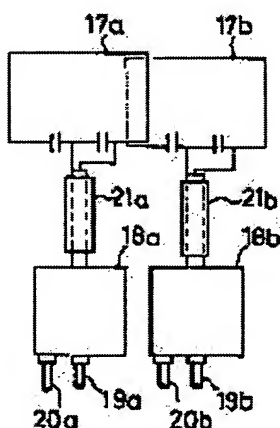
(72)Inventor : OKAMOTO KAZUYA  
YOSHIOKA HIDEKI  
SUZUKI TAKUJI

## (54) MAGNETIC RESONANCE VIDEO DEVICE AND PROBE FOR MAGNETIC RESONANCE VIDEO DEVICE

(57)Abstract:

PURPOSE: To prevent the generation of a ground loop and to obtain good images by providing at least a part of the earth conductors of a means for connecting the signal reception signals by signal receiving coils for receiving magnetic resonance signals to preamplifiers for amplifying the signal reception signals with high-impedance sections.

CONSTITUTION: This magnetic resonance video device impresses magnetic field gradients changing linearly in directions X to Z from gradient magnetic field forming coils to a examinee, impresses high-frequency magnetic fields from the coils for signal reception and receives the magnetic resonance signals from the examinee by surface coils 17a, 17b which are the coils for signal reception. There is a tendency to the generation of the ground loop by the floating capacitances, etc., between the surface coils 17a, 17b and the earth conductors and, therefore,



baluns 21a, 21b of a bazooka type are formed on coaxial cables connecting the coils 17a, 17 and the preamplifiers 18, 18b in such a case. As a result, the electrical coupling of the signal transmission coils and the ground loop is averted and the uniform irradiation with the high-frequency magnetic fields is possible.